



Metro **Public Health** *Dept*

Nashville / Davidson County

Annual Report

***People Creating Healthy
Conditions Everywhere***

Karl F. Dean
Mayor

William S. Paul, MD, MPH
Director of Health



Nash *Vitality*

*The spirit of a
healthy, active and green city*

December 2012

Our Governance

A six member Board of Health, appointed by the Mayor and confirmed by vote of the Metro Council, governs the Department. Current members are:



William Hance, JD, Chair

Assistant Vice Chancellor for Medical Center News and Communications,
Vanderbilt University Medical Center, retired



Ruth C. Stewart, MD, Vice Chair

Clinical Faculty Family Medicine Physician, Meharry Medical College



Henry W. Foster, Jr., MD, FACOG

Professor Emeritus, former Dean and Vice President for Medical Services,
Meharry Medical College
Clinical Professor, Obstetrics and Gynecology, Vanderbilt University



Carol Etherington, MSN, RN, FAAN

Director of Global Health Studies, Vanderbilt University School of Medicine
Assistant Professor of Nursing, Vanderbilt University School of Nursing



Samuel L. Felker, J.D.

Attorney, Bass, Berry & Sims, PLC



Alicia Batson, MD

Psychiatrist, Centerstone

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Cover photo of Nashville skyline: Gary Layda, Metropolitan Government

Message from the Mayor



As Mayor of Nashville, I congratulate the Metropolitan Public Health Department, Dr. Bill Paul, and the Board of Health on another successful year in the continued promotion of a healthier and safer city.

Obesity is one of the major issues that we must address as a nation and as a community. As I challenge Nashvillians to become more active, the Health Department's staff have been expert partners. During the 2011-2012 school year, more than 46 school gardens were active. By June 2012 the Nashville GreenBikes Program had expanded to make bikes available to residents and visitors at nine of the Metro Parks and greenways. In March 2012, I launched the yearlong Mayor's Workplace Challenge which encourages businesses and organizations throughout Nashville to show their impact on the livability of our city. Many are answering the challenge.

As a result of Nashville's successful efforts, we were asked to host a premiere for the HBO documentary series *Weight of the Nation* on April 16, 2012. *Challenges*, the fourth episode in the series, is focused on Nashville as a city with solutions to address the obesity epidemic.

In addition, the Health Department continues to serve the citizens of Nashville in many vital ways. WIC program issued 219,176 vouchers to families in need this past year. The Department also provided 40,512 food packages to elderly low income citizens, 14,335 childhood immunizations, and 11,058 flu shots. Health Department school nurses completed 87,145 medical procedures in Davidson County schools, enabling children with health conditions to attend school and achieve their highest potential.

Nashville is a dynamic place to live, work, and play; I commend the Health Department for working to also make it a healthier place.

Sincerely,

A handwritten signature in blue ink that reads "Karl F. Dean". The signature is fluid and cursive, with a long horizontal stroke at the end.

Karl F. Dean
Mayor

Message from the Health Director of Metropolitan Nashville and the Board Chairman

Public Health reflects the action taken by our community to create conditions where everyone can be healthy. Cleaner air, safe restaurants, and protection from epidemics, dog bites, injuries, and cancers benefit all of us, and they are made possible because our community has made a commitment to invest in public health and safety.

Investments in public health pay off, because healthy people cost less. The Trust for America's Health estimates that a \$10 per person annual investment in proven community prevention efforts to prevent chronic disease would pay for itself in 1-2 years, and over the course of 10-20 years would have a 6:1 return. Even a small reduction in surge of diabetes in our community will have a big payoff in reduced health care costs.



William N. Hance, JD
Board Chairman



William S. Paul, MD, MPH
Director of Health

The Metro Nashville Public Health Department staff, supported by Communities Putting Prevention to Work, worked in partnership with the Mayor's Office and community partners to create healthy change and boost the NashVitality movement. From healthy school food to community gardens, bike share to urban planning, in neighborhoods, workplaces, schools, and places of worship across Nashville, people are creating environments where the healthy choice is the easy choice. We need to sustain these efforts, work in partnership, forge coalitions, and think beyond medical care to prevent and reduce the costs of chronic disease over many years to ensure that Nashville is as healthy as it can possibly be.

We are grateful to Mayor Karl Dean for his leadership and support. We also thank members of the Metro Council, other elected officials, the Board of Health, and every person who takes action to create healthier conditions in Nashville and contributes to our community's effort to improve our health and well-being.

Thank you for taking the time to read our annual report and for caring about the health of this outstanding community.

A handwritten signature in blue ink that reads "William N. Hance".

A handwritten signature in blue ink that reads "William S. Paul".

¹Levi, J. et al, Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities, Trust for America's Health, Feb. 2009. Available online at: <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>

Our Vision: People Creating Healthy Conditions Everywhere

Department Mission:

To protect and improve the health and well-being of all people in Metropolitan Nashville.

We Take PRIDE in Our Core Values:

Professionalism: We are well-trained, knowledgeable, capable and focused. We strive for excellence and innovation. We are accountable.

Respect: We listen. We care about our customers. We care about one another. We are courteous, friendly, attentive, prompt and effective in serving our customers, our partners and one another.

Integrity: We are honest, trustworthy and consistent. We are good stewards of the public resources in our care.

Dedication: We are passionate about providing excellent service. We are always available to protect the health and well-being of our customers and community.

Equality: We value diversity in our managers, team members, customers, and partners. We treat our customers, our partners and one another with fairness and impartiality. We accommodate the special needs of our customers. We strive to eliminate disparities and aim for equity and justice in health.

The Metro Public Health Department contributes to the health and safety of the city by working to:

- Identify, analyze and track public health conditions to help guide public health action
- Provide leadership in efforts to make the city a healthier place
- Efficiently deliver high-quality public health services
- Advocate for and enforce policies and laws that promote health
- Build partnerships that improve the reach and effectiveness of community action to improve health
- Respond to public health emergencies, including communicable disease outbreaks, terrorism and natural events

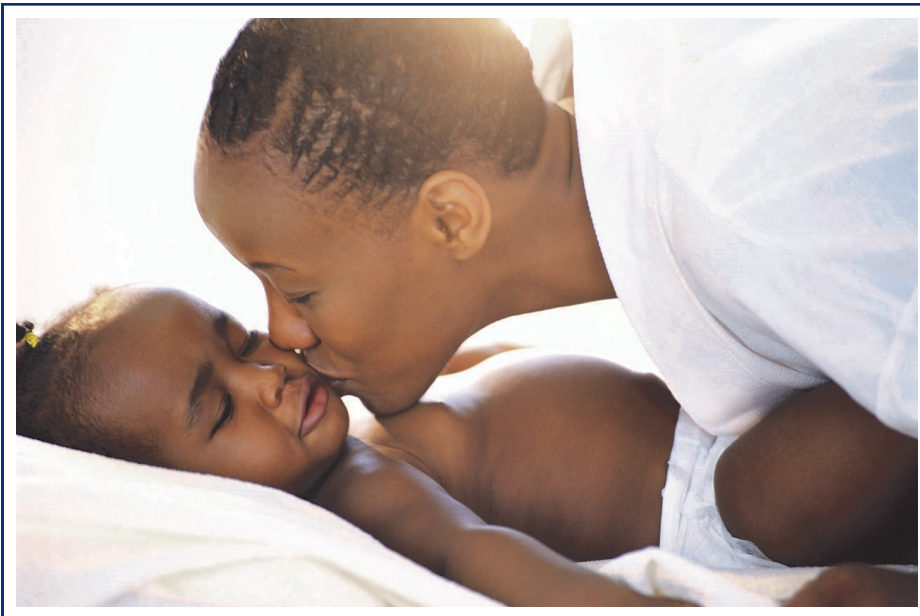
MPHD Report on Goals

Goal One: Improving the health and well-being of children	2006	2007	2008	2009	2010	2011
Percent of infants born with low birth weight	9.8%	9.3%	8.7%	9.1%	8.7%	NA
Number of preventable child deaths (0 -17 yrs)	22	29*	24	25	43	NA
Percent of 24-month-old children adequately immunized against preventable disease	85.5%	84.5%	81.70%	79.5%	72.6%	82.9%
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Percent of school children evaluated that are overweight/obese (Coordinated School Health)	27.7%	23.6%	36.10%	38.10%	38.20%	36.5%
	FY2007	FY2008	FY2009	FY2010	FY2011	FY2011
Percent of children evaluated who are free from untreated oral disease	68.4%	73%	74%	77%	79%	78%
Goal Two: Increasing physical activity and healthy eating and reducing tobacco use in Nashville	2005	2006	2007	2008	2009	2010
Percent of adults who are current smokers — Behavioral Risk Factor Surveillance System (BRFSS)	21.2%	—	—	22.4%	20.4%	16.2%
Percent of adults who are overweight or obese (BRFSS)	64.2%	—	—	60.5%	68.0%	58.2%
Percent of adults who exercise (BRFSS)	71.3%	—	—	75.9%	74.1%	61.2%
	2002-03	2006-07	2008	2009	2010	2010
Percent of high school students who smoke — Youth Risk Behavior Survey	23.0%	21.3%	NA	NA	12.8	NA
Goal Three: Ensuring cleaner air and a safer environment	2006	2007	2008	2009	2010	2011
Percent of days with air quality in good to moderate range	97.5%	95.9%	99.2%	100%	99.7%	98.1%
Number of animal bites	707	732	868	779	633	776
Number of animals impounded	13,251	13,210	13,433	12,955	12,437	10,948
Number of animals spayed and neutered	748	1,092	994	994	948	1,054
Number of adoptions		1,702	1,359	1,338	1,148	1,262
Goal Four: Preventing, detecting and alleviating outbreaks and emergencies	2006	2007	2008	2009	2010	2011
Rate of active tuberculosis cases (per 1,000)	10.4	9.8	11.9	9.8	6.1	6.0
Rate of primary and secondary syphilis (per 100,000)†‡	5.9	12.0	13.0	11.5	9.1	9.1
Number of persons tested for HIV	9,139	9,249	6,943	9,389	14,484	14,252
Goal Five: Improving access for everyone to needed preventive, medical and behavioral health services	2006	2007	2008	2009	2010	2011
Number of HIV patients receiving care	2,595	2,663	2,590	2,390	2,651	2,141
Number of HIV/AIDS related deaths	61	57	46	41	NA	27
Number of uninsured clients linked to medical and mental health services	9,820	9,589	3,962	4,895	4,408	3,391

*Unconfirmed or provisional • †MPHD Division of Epidemiology analysis of STD data from STDMS (morbidity records) for 2006 - 2007. State level data from Tennessee Department of Health (NETSS). • ‡2008 revision of population estimates from the Tennessee Department of Health (TDH) Office of Health Statistics used to calculate local and state rates. • Dates denote calendar year if not specified otherwise. FY = Fiscal Year. NA = Not Available

Goal One: Improving Health and Well-being of Children

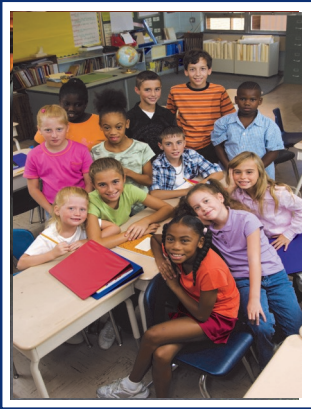
- 15,955 Child Preventive Health Visits (physicals, head lice, immunizations) were provided
- 6,975 home visits were completed, providing at-risk households with education, services, resources, and compassion to help reduce infant mortality
- 1,654 young adults received education related to healthy choices and healthy lifestyles
- 5,000 high school students received education related to public health careers
- Over 168 youth participated in step teams at 12 community centers across Davidson County. Youth benefited from the physical exercise, team interaction, health education and nutrition. Step teams perform precision movements while reciting positive health messages
- 103 parents received education to support youth in making healthy and responsible decisions
- 1,127 children received Early Periodic Screening Diagnosis and Treatment (EPSD&T) Physicals
- 100 children received car seats through home visiting programs



Goal One: Improving Health and Well-being of Children

- School nurses completed 87,145 medical procedures in Davidson County schools, enabling children with chronic health conditions to attend school
- 36,214 children were seen in school clinics

School Nurses Help Children Stay in School



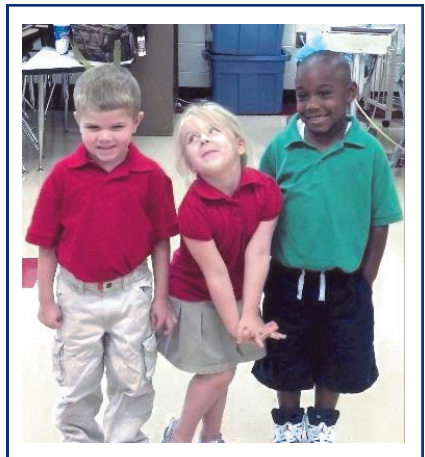
School Nurses provide essential procedures for children with chronic health conditions.

In addition to providing scheduled medications, school nurses also provided the following:

- 7,441 injury/first aid visits
- 20,580 illness assessments
- 18 mental/behavioral health support visits
- 111 individual health education visits
- 8,064 other health-related encounters

School Oral Disease Prevention Program

- Health Department dental hygienists provided personal oral health education to 23,457 students in Title I schools
- 10,910 students received dental screenings in our community
- 20,689 sealants were placed on children's teeth to protect them from tooth decay
- An 11-year investment in oral disease prevention improved the percentage of K-8 children who are free of oral disease from 56% in 2001 to 78% in 2011



Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Communities Putting Prevention to Work (CPPW)

During the second year of the CPPW campaign, staff continued to address healthy eating and active living through policy, systems and environmental change (PSE) strategies that support making the healthy choice the easy choice in places where we live, learn, work, play and worship. These strategies were designed to impact populations across the lifespan.

Gold Sneaker

In March 2012, the Metropolitan Action Commission Policy Council adopted the Metro Action Commission Head Start Gold Sneaker Policy. The Gold Sneaker policy is designed to enhance policy and practice related to physical activity and nutrition within licensed child care facilities.

Schools

Metro Nashville Public Schools adopted the School Garden Property Use policy in March 2012 which recognizes the benefits of school gardens and supports their use on school property. This policy is designed to streamline the process for operating a garden on school property. During the 2011-2012 school year, more than 46 school gardens were active.

The Metropolitan Nashville Board of Public Education adopted a Farm to School Resolution in June 2012 which encourages and supports the establishment of a farm-to-school program to increase both local and fresh foods in the cafeteria, and create and promote school gardens.

Youth Serving Organizations

CPPW staff conducted a workshop in January 2012 for youth serving organizations to assist them in developing and adopting policy on healthy eating and physical activity. The following organizations successfully adopted policy which affects more than 100,000 youth in Davidson County: Martha O'Bryan Center, Rocketown of Middle Tennessee, Bridges, Rejoice School of Ballet, Boys & Girls Club of Middle Tennessee, Jess Neely Athletics, and Metro Parks & Recreation.

Workplaces

In November 2011, the Metro Public Health Department adopted five policies that improve employee wellness due to increased access to healthy eating and physical activity choices. These policies have become the policy template for other Nashville organizations interested in creating a healthier workplace. The policies are: Access to Water, Active Transportation, Healthy Meeting and Guidelines, Healthy Vending, Lactation and Physical Activity.

Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Communities Putting Prevention to Work (CPPW)

In March 2012, Mayor Karl Dean launched the yearlong Mayor's Workplace Challenge which encourages businesses and organizations throughout Nashville to score their workplace environment on healthy, involved and green. Businesses and organizations are challenged to show their impact on the livability of our city.

Places of Worship

Ten faith congregations signed the "Prescription for a Healthy Place of Worship" in January 2012 which pledges to provide healthier meals and vending options, physical activity, and tobacco-free campuses to their congregants.

Bikeshare Program (including safety)

The Nashville GreenBikes launched the availability of free bikes in July 2011. By June 2012 the program had expanded to make bikes available to residents and visitors at nine of the Metro Parks and greenways. In March 2012, MPHD and Mayor Karl Dean's Bicycle and Pedestrian Advisory Committee (BPAC) launched *Moving in Harmony* – an educational campaign to increase safety for all users of the road in Nashville Davidson County.

Weight of the Nation HBO Series

On April 16, 2012 Nashville hosted a premiere for the HBO documentary series *Weight of the Nation*. The fourth episode in the series which is titled *Challenges*, is focused on Nashville as a city with solutions to addressing the obesity epidemic.

Community Events that celebrated health:

Walk 100 Miles with Mayor Karl Dean,
March 2011-August 2011

Mayor's 5K November 13, 2011

NashVitality Week, January 15-21, 2012

Mayor's Field Day, May 5, 2012



Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

39,399 clients were screened for tobacco use in all MPHD clinics

Eliminating Exposure to Secondhand Smoke:

Promotion of smoke-free environments

- 71 smoke-free home and car policies were signed by individuals (July 1, 2011 thru June 30, 2012)

Enforcement of the Tennessee Nonsmoker Protection Act

- The MPHD's Food Protection Services Division enforces the Tennessee Nonsmoker Protection Act in all food establishments that fall under its authority for inspections
- MPHD's Food Protection Services Division issued 132 advisory letters and 10 warning letters. No civil fines were assessed

Preventing Youth Tobacco Use

- Tobacco Retailer Noncompliance Rate (percentage of retailers in Davidson County cited for selling tobacco to minors, data from the Tennessee Department of Agriculture's Tobacco Enforcement Program), dropped from 4.32% in 2010 to 4.17% in 2011, although still under the 2010 state average of 10.09%

Davidson County Tobacco Data: Adult Tobacco Use (BRFSS)

Based on the 2010-2011 Behavioral Risk Factor Survey, 16.2% of Nashville residents are current smokers. This is lower than the rate seen across Tennessee (23%) or nationwide (21.2%).



Through the Step concept program participants are engaged in educational lessons around healthy eating, active living and improving one's health efficacy.

Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Walk to School Day

On October 3, 2012, Mayor Dean, Dr. Bill Paul, Dr. Jesse Register and many others participated in Walk to School Day at Coleman Elementary, an event held during Walk Nashville Week.



Breastfeeding Welcomed Here

In July 2011, Metro Civil Service Commission adopted a Lactation Policy that provides for adequate location and time for lactating employees to express milk. This policy impacts more than 10,000 Metro employees and their families.

Four of the five Maternity Hospitals in Nashville were awarded the 'Give Me Five' Designation in April 2012. "Give Me Five" honors area hospitals' dedication to promoting and supporting breast feeding and celebrates incremental success as hospitals within Davidson County work towards adopting the 10 Steps for Breastfeeding Success model developed by the World Health Organization and UNICEF.



A Closer Look

Based on the 2010-2011 BRFSS, in Davidson County, more men are current smokers (19%) compared to females (14.9%). Non-Hispanic black residents (17.6%) report being current smokers more frequently than non-Hispanic white residents (15.8%). Educational attainment is inversely related to one's smoking status: 41.2% of residents with less than a high school education report they are current smokers compared to just 7.6% of residents who graduated from college or a technical school.

Having smoked a cigarette in the past 30 days has declined sharply among high school students based on the 2010 Youth Risk Behavior Survey when 12.8% reported this behavior compared to 21.3% in 2007.

Goal Three: Ensuring Cleaner Air and a Safer Environment



Metro Public Health Department is required by the Board of Health Regulation No. 9 and a Metro Ordinance to evaluate Metro Public School buildings and other Metro buildings for radon. During the past fiscal year, 80 schools and 138 other public buildings were tested for radon. In addition, retests after diagnostics and mitigation activities are ongoing in buildings where radon levels met or exceeded EPA action levels.

Of the 956 persons trained to manage food service operations, 12 spoke Chinese, 118 spoke Spanish, and 826 spoke English. Nashville's growing diverse population requires that training classes be offered in several different languages.

Animal Control

- 18,523 complaints from citizens were answered
- 578 animals were returned to their owners
- 17,188 citizens visited the shelter
- 1,266 adoptions represent a decrease of 5.4% from 1,148 in FY11

Food Protection

- 12,022 food service establishment inspections were conducted
- 488 complaints and service requests were answered
- 647 food service permits were issued
- 956 persons were trained to manage food service operations

Public Facilities and General Sanitation

- 7,021 premises were inspected for pests and rodents
- 6,478 swimming pools were inspected
- 713 hotels/motels were inspected
- 740 child care centers were inspected
- 194 schools were inspected
- 1,000 mosquito batches were tested for West Nile virus
- 400 homeowners learned how to protect themselves from biting mosquitoes during Backyard Inspection Day
- 3,734 health violations were detected and notices issued
- 2,549 health violations were abated

Goal Three: Ensuring Cleaner Air and a Safer Environment

- Nashville met National Ambient Air Quality Standards 359 out of 366 days during the past fiscal year.
- MPHD continues to partner with the Mayor's Office regarding Nashville's greenhouse gas emission inventory.

Air Quality

- 587,267 vehicles were inspected
- 2,471 inspections were performed
- 52,492 ambient air samples for various pollutants were collected
- 880 operating permits were issued to air pollution sources
- 56 complaints from citizens were handled
- 324 asbestos removal permits were issued



Combining the use of public transportation with walking or biking produces a cleaner environment, saves money, and increases physical activity

Air Pollution: Recommendations For Everyone

- Utilize public transportation
- Encourage individuals and organizations to create and implement policies related to reducing emissions
- Walk to work, library, grocery store, a friend's house
- Encourage ride sharing/carpooling
- Consider four day work week/flexible scheduling/telecommuting
- Designate covered bike parking and "green" parking spaces for those who carpool or drive high-efficiency (fuel-flex, bio-fuel or hybrid) vehicles

Goal Four: Preventing, Detecting and Alleviating Outbreaks and Emergencies



Immunizations (July 1, 2011, through June 30, 2012)

- 14,335 children were immunized through our Fast Track and preventive health clinics
- 4,742 vaccinations were administered through our adult immunization program
- 11,058 flu shots were given

The rate of TB in Davidson County during 2011 was 6.0 per 100,000 compared to a statewide rate of 3.0 and a national rate of 3.6 per 100,000.

Tuberculosis Control (2011 Calendar Year)

- 42,348 services were provided to persons receiving care through the TB Elimination Program
- 24,846 TB program visits were delivered
- 655 persons who were at risk due to close contact with TB patients were identified and evaluated for infection
- 834 persons received their TB treatment via directly observed therapy or directly observed preventive therapy

Sexually Transmitted Diseases and HIV/AIDS (2011 Calendar Year)

- 19,151 STD clinic visits were completed
- 176 HIV cases were reported to the Tennessee Department of Health
- 1,284 persons tested positive for chlamydia, syphilis and/or gonorrhea
- 2,281 field investigations were initiated and completed

Goal Four: Preventing, Detecting and Alleviating Outbreaks and Emergencies

Public Health Emergency Preparedness

The Public Health Emergency Preparedness (PHEP) Team continues to make great strides in planning, training and preparing for emergency events. Public and private partnerships have increased dramatically over the past year, helping to make the Nashville community even more resilient during man-made or natural disasters. Increased coordination and collaboration with other responding agencies has improved preparation and streamlined response strategies.



Staff train regularly in varied aspects of public health emergency preparedness.

Over the past year, MPHD's PHEP Team has:

- Established the community's first Nashville Medical Reserve Corps (NMRC). The NMRC will recruit, train and deploy medical and non-medical volunteers during emergency events.
- Purchased over 4,000 weather radios to aid in individual awareness to and preparedness for emergency events. The purchase of these devices was a direct result of a Community Assessment for Public Health Emergency Response (CASPER) conducted in partnership and coordination with the Tennessee Department of Health.
- Increased community outreach and awareness projects. Over 5,000 Nashvillians, including children, have received emergency preparedness educational material, bags, flashlights and hand sanitizer over the past year.
- Developed a Hazard Vulnerability Assessment for the Metro Public Health Department Emergency Preparedness planning region. This assessment helps to identify the likelihood of certain emergency events, estimate which events will have the greatest impact on the well-being of Davidson County citizens and informs future planning.
- Successfully activated the Regional Health Operations Center (RHOC) during the multi-regional Full-Scale POD Exercise in April 2012.
- Continued to improve its annual Technical Assistance Review (TAR) score from 62 in 2008 to 96 in 2012. The CDC designed this tool to measure progress in planning for countermeasure distribution and dispensing and to identify best practices and areas for improvement.

Goal Five: Improving Access for Everyone to Needed Preventive, Medical and Mental Health Services

Based on the most current estimate, 98,464 Nashvillians are without health insurance.

Through the Bridges to Care and Pharmacy Program, WIC Clinics and a network of safety net providers, we work to assure that all Nashvillians, particularly the most vulnerable, have access to quality health care services

Bridges to Care

- 58,697 persons have been linked to a medical provider since the program's inception in February 2002
- 198,428 prescriptions have been filled (since 2002)
- 2,672 uninsured persons were linked to a regular source of primary care during FY 2012

Women, Infants, and Children (WIC) and Commodity Supplemental Food Program

- 40,512 food packages were provided to elderly persons



- An average of 18,264 persons per month were provided with WIC supplemental food vouchers and nutrition education services
- 219,176 WIC vouchers were issued

Mental Health

- 843 people were screened for mental health and substance abuse issues
- 719 people were successfully linked to mental health and/or substance abuse services

WIC Program issued needed food vouchers to moms and children.

Service Locations



Lentz Public Health Center
311 23rd Avenue North, 37203



Metro Animal Care and Control
5125 Harding Place, 37211

Woodbine Public Health Center
224 Oriel Avenue, 37210

East Nashville Public Health Center
1015 East Trinity Lane, 37216

Commodity Foods Warehouse
1417 Murfreesboro Road, 37217

South Nashville WIC Nutrition Center
3718 Nolensville Pike, 37211

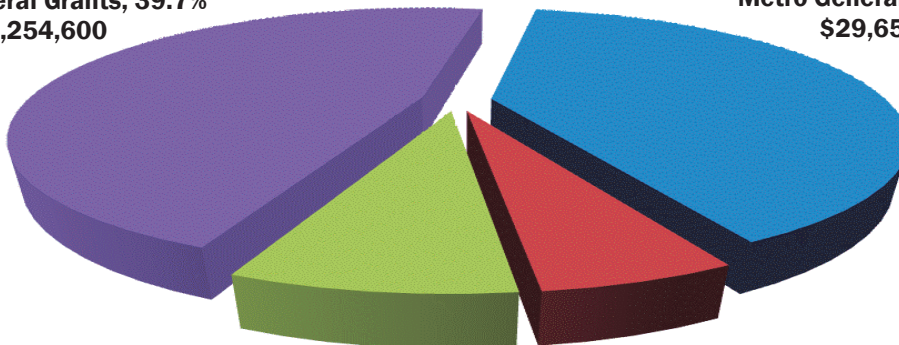
Sources of Funding: \$63,668,112

State & Federal Grants, 39.7%
\$25,254,600

Metro General Fund, 46.6%
\$29,656,812

Fees for services, 8.1%
\$5,150,500

Other Grants, 5.7%
\$3,606,200





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This report was prepared by Dr. Bill Paul, Jannie Williams, and Martha Bickley